VOL. 18 NO. 1 FEBRUARY 1988

VICTORIAN ENTOMOLOGIST

Registered by Australia Post
Publication No. VBG0277
Price $1

News Bulletin of
The ENTOMOLOGICAL
SOCIETY of VICTORIA

THE ENTOMOLOGICAL SOCIETY OF VICTORIA

Membership

Any person with an interest in entomology shall be eligible for Ordinary Membership. Members of the Society include professional, amateur and student entomologists, all of whom receive the Society's News Bulletin, the Victorian Entomologist.

Objectives

The aims of the Society are :

(a) to stimulate the scientific study and discussion of all aspects of entomology,
(b) to gather, disseminate and record knowledge of all identifiable Australian insect species,
(c) to compile a comprehensive list of all Victorian insect species and
(d) to bring together in a congenial but scientific atmosphere all persons interested in entomology.

Meetings

The Society's meetings are held at Clunies Ross House, National Science Centre, 191 Royal Parade, Parkville, Victoria, at 8 pm on the third Friday of even months, with the possible exception of the December meeting which may be held earlier. Lectures by guest speakers or members are a feature of many meetings at which there is ample opportunity for informal discussion between members with similar interests. Forums are also conducted by members on their own particular interest so that others may participate in discussions.

Annual Subscriptions

Ordinary Member	$10.00	
Country Member	$ 8.00	(100 km + from GPO)
Student Member	$ 5.00	
Associate Member	$ 2.00	(no magazine)

No additional fee is payable for overseas posting by surface mail of the News Bulletin. Associate Members, resident at the same address as, and being immediate relatives of an Ordinary Member, do not automatically receive a copy of the Society's publications but in all other respects rank as Ordinary Members.

Contributions to the Victorian Entomologist

The Society welcomes contributions of articles, papers or notes pertaining to any aspect of entomology for publication in the News Bulletin. Contributions are not restricted to members but are invited from all who have an interest. Material submitted should be responsible and original. Statements and opinions expressed are the responsibility of the respective authors and do not necessarily reflect the policies of the Society.

When contributions are typed it would be of great assistance if they are typed on A4 (International Quarto) paper, one and a half spaced with triple spacing between paragraphs and a margin of 3 cm.

Advertising

The charge for advertising is $5.00 per half page.

Cover illustration by W.N.B. Quick.
Cyria imperialis (Fabricius), Banksia Jewel Beetle (Buprestidae).

MINUTES OF THE GENERAL MEETING, DECEMBER 11, 1987

The President opened the meeting at 8.10 pm.

Apologies: M. Le Souëf, A. Neboiss

Present: M. Braby, G. & J. Burns, P. Carwardine, K. Clark, M. & P. Coupar, D. Crosby, K. & L. Dunn, I. Faithfull, R. & J. Field, D. & J. Holmes, M. Hunting, P. Kelly, D. McLaren, T. & D. New, S. Smith, B. Vardy, R. Vargi.

Minutes of the October general meeting (Vic. Ent. 17: 98-99) accepted (J. Field/Crosby).

Correspondence. Detailed, discussed and tabled. Received (R. Field/Carwardine).

Treasurer's Report. G. Burns reported credit balances of $2526.60 (General Account), $120.00 (Junior Entomological encouragement fund) and $1863.63 (Le Souëf Memorial Award Fund). There are 74 financial members. Received (Clark/J. Field).

Editor's Report. I. Faithfull gave an analysis of contents of volume 17 of the Victorian Entomologist. 'Butterfly articles' predominated, but there were also a spectrum of other topics, and highlights included an historical issue, information on the Eltham Copper issue and Max Moulds' Le Souëf Award address. Efforts by Ian to revive 'On the Grapevine' and to summarise recent literature were clearly appreciated by members present. Thanks were given by Ian to the Clunies Ross House printery office for their helpful and efficient service. Received (Kelly/J. Burns).

D. Crosby summarised the feelings of all present in congratulating the Editor on the fine job he was doing for the Society.

Excursions. P. Carwardine commented briefly on the Tallarook excursion and reminded members of the planned day at Lake Mountain on February 28.

General Business. The President introduced a discussion on the value of incorporating the Society. D. Crosby outlined the case for this, supported by P. Carwardine and P. Kelly. G. Burns exemplified the costs of the alternative of insurance. The meeting supported Council's recommendation that incorporation should be investigated early next year.

Exhibits.

1. D. Crosby.

   (a) Photographs of the habitat of the Eltham Copper.
   (b) Notoncus ants and eggs of the Eltham Copper under the microscope.
   (c) Ticks from Mallacoota, under the microscope.

2. G. Burns.

   (a) Eucalypt branches cut by larvae of boring beetles, such as cerambycids and buprestids. Several members exemplified parallel cases. (D. Holmes: Casuarina; P. Kelly: Exocarpus)

3. D. Holmes.

   (a) A case of Lepidoptera from his recent trip to the Northern Territory and Western Australia, with comments on variation in species from north to south of the country. Specimens included Liphyra brassolis.

4. R. Field.

   (a) Butterflies from W.A., as per his recent article in Vic. Ent. 17(6), including series of the probable new Ogyris spp.
   (b) Slides of early stages of these Ogyris, and of various early instar Satyrinae.

5. M. Coupar.

   (a) Slides of insects associated with mistletoes, including life-histories of Delias aganippe and D. harpalyce (the latter with different coloured pupae in different generations (orange in spring/summer, black in autumn)), Comocrus sp. and mistletoes parasitic on other mistletoe species.

6. M. Hunting

   (a) A case of the various forms of Candalides butterflies.

7. I. Faithfull

   (a) Bladder cicadas, sent by Jean Brown.
   (b) Specimens captured during a migration of wasps: 2 species of Lissopimpla (Ichneumonidae) (are these 'tracking' migration hosts such as Bogong moths?).
   (c) A tineid moth reared from a larva feeding on a cast snakeskin.
   (d) A copy of the new edition of 'Scientific and Common Names of Insects in Australia', with a comment that rather few butterflies were included!

8. M. Braby.

   (a) Caterpillars of D. aganippe from Rushworth: rapid growth noted. Discussion followed over the problems of transferring newly hatched caterpillars to fresh supplies of food. D. aganippe seem to rely on silk for movement, and attempts to move them artifically were unsuccessful.

9. T. New.

   (a) Photographs of the three larval instars of an unusual lacewing larva: Norfolius (Nymphidae), from Lord Howe Island.

10. K. Walker.

   (a) An overhead transparency of various pinning positions and mounting techniques for various groups of insects, and a box of specimens to exemplify these. Many members participated with comments on pinning, setting and correct labelling of specimens.

The President closed the meeting at 9.30 pm., inviting all present to supper in the Sciences Club.

ON THE GRAPEVINE

Gordon Burns reports that buprestid taxonomist Shelley Barker has named a Stigmodera after him - gordonburnsii or similar- a red and blue species from the Grampians. Congratulations Gordon. The Baeckia at Inglewood on 9 December proved disappointing - it rained.

David Crosby has acquired a property at Mallacoota in the far east (of Victoria). Mallacoota is well placed to provide some new butterfly records for the state.

Ken Walker and Arturs Neboiss will spend two weeks in February in Tasmania doing some general collecting for the Museum. They are hoping to have a couple of helicopter flights into remote areas.

With the return of Ian Thornton to LaTrobe in late February, Tim New can look forward to putting aside the administration of the Department and returning to some real (research) work. Already this year Tim has had short trips to the Bogong High Plains and Mts. Howitt and Stirling for browns and geometrids.

Jason Beringer of Warrandyte is welcomed as a new member.

As of mid December Michael Braby was poised to discover the location of a big Hypochrysops colony near LaTrobe University.

Peter Carwardine led the Field Naturalists Club of Victoria on their excursion to Mt. Donna Buang on February 7. The air was so cold the breath condensed in front of the face but a few butterflies were seen including a single Macleay's Swallowtail.

Newspapers of 28 January offered the opportunity (some would say 200 years late) to "Stop the European invasion today!" "With the worst still to come" advertisements offered a "simple, safe and effective" method, "the perfect way", "ingenious" and "re-usable". The secret is the "irresistable"(sic)"sugary solution inside". The product? The $7.95 Smith and Nephew, Small Wonders (no plug intended) European Wasp Trap.

POLYURA PYRRHUS SEMPRONIUS (FABRICIUS), 1793

Jean Brown, 4 McDonell Avenue, Cundletown, New South Wales, 2430

A Tailed Emperor was the first large butterfly I netted. I watched it for three days, coming to feed on the nectar of Bauhinia galpinni (B. punctata), always between 12.30 and 1 pm each day. As I took it, on the fourth day, in my net, it struggled and I felt it press against my fingers so strongly I almost fainted and felt sick! I have never netted one again.

I have bred them, then released them (only today, 26 October 1987, one has emerged and is hanging, till tomorrow, before taking off- at least it wasn't taken by a mantis) and I feel I am contributing to their life. It is difficult to follow their life cycle because the plants they lay on are rather difficult to keep alive in water indoors. Those I have reared from eggs have always been fed on Caesalpinea decapetala (Thorny Acacia). Brachychiton acerifolius (Illawarra Flame Tree) leaves do not keep fresh for long, and the leaves of Cassia fistula droop very quickly and then the larva will not feed on them.

The larvae, on all three of these plants, lie with head facing the petiole of the leaf (as Robert Fisher noted : Victorian Entomologist 17(4):73, August 1987) - is this so they can leave a silken trail back to their silky nest when they leave it to feed?

On Caesalpinea, they travel a fair way to feed; on Cassia fistula, the next leaf stalk to the one they "nest" on is their larder. On Brachychiton, it is a couple of leaf stalks away also.

It seems that if they cannot find their way back to the nesting place, they cannot survive. So, in artificial breeding conditions, one has to retain the original stems of leaves for them to find their way "home". One ends up with a jar full of dead old leaf stalks!

I can presently see, on Cassia fistula, two larvae, one about 50 mm and one about 35 mm long. The eggs were laid in early and late May. The larger one has one golden band and the smaller one is just showing it will have two bands. Does this mean one is male and one female? They should pupate soon and emerge in late November, if the birds, or the preying mantis (which eats a hole in the pupa and apparently sucks out their juices) don't get them. Sometimes it is very difficult to love "all creatures great and small".

It is terrific to have all these things wolving in one's garden, but one does become very involved with them. They become so personal when one can look at them and see which leaflet they have had for breakfast that morning. I look forward to November when these lovely butterflies will be coming to drin' the sap of the Cassia. They become quite intoxicated after imbibing and one can just pick them off, very gently, and put them back, with barely a flicker of their wings. I hope they don't mind, they don't seem to notice at all.

BOOK REVIEW

Australia's Buttorflies

by Potor Wilson
Kangaroo Press, Konthurst, NSW, 1987

This soft covered book of 64 pages and 16 colour plates is directod at people who are interested in the Australian butterflies but who do not want an in-depth toxt book. It is thorefore written in a simple but easily-read stylo, with technical terms well dofined.

As the author says in the proface, tho intention of tho book is to show tho bonuty of butterflies in photographs, not for use primarily for identification. Included only are specios which ho has managed to photograph and study. Nevertheless this gives a roasonablo ropresentation of tho fauna. As a result 82 species (of the total fauna of 384) aro illustrated with generally excellent, coloured, in-field photographs. All species have at least one sex shown, and 6 have the opposito sex illustrated. Thoro aro 32 photographs depicting tho life histories of 10 species. In addition thore aro 9 drawings and 4 black and white photographs. Tho photos aro well printed and reasonably large; sufficient to determino details of markings. Common names are given for all the specios, in addition to the scientific names.

This is a popular book for the casual obsorver or novice collector, not tho serious student. However the contents are comprohensivo and includo a general introduction to insect size, structuro, vision, lifo cycle, flight, sonses, poisonous butterflies, bohaviour, butterflies and temperature, migration and habitat. This section is very adoquate for the likely reader but does not go into too much depth.

Tho next section briofly doals with nomenclature and omphasizos the nood to learn the scientific namos. It is followed by a section on tho practical aspects of collecting butterflies, with equipment and techniquos covered. A brief but useful chapter on how to photograph butterflies follows, emphasizing the difficulties oncountered and possible solutions.

The next section consists of 38 pages of goneral notes on each of the 82 specios photographed. Each is about a quartor-page in length and gives a brief outlino of the adult's field habits, size, soxual differences and geographical rango (but not specific localities). Most also havo life history dotails, with food plants named. Finally, thoro is an adoquate indox undor the hoadings of subject, scientific names and common names.

I folt two itoms should havo boon mentionod. First, that skippor life histories are different (i.e. larvae and pupao in shelters) from the more generalised type in the other families, and, second, a montion of the difference between moths and butterflios - a feature so often uncloar to potential readers of this typo of publication. Despite theso omissions, the book is excellent for its market and recommended at around $15.00

D.F. Crosby

BUTTERFLIES OBSERVED IN CARNARVON GORGE NATIONAL PARK, QUEENSLAND, BETWEEN 1 AND 3 JANUARY 1985

Tony Norton, 32 Chatsworth Road, Prahran, Victoria, 3181

Carnarvon Gorge National Park is located about 90 km south of Springsure and 600 km north-west of Brisbane.
The numbers preceding each species are those allocated in Butterflies of Australia (Common and Waterhouse, Field Edition, 1981).

Hesperiidae

100 Cephrones trichopepla, yellow palmdart

Papilionidae

9 Papilio aegous, orchard butterfly
15 Crossida crossida, big greasy

Pieridae

1 Catopsilia pyranthe, common migrant
2 Catopsilia pomona, lemon migrant
7 Euroma hocabe, common grass yellow
9 Eurema smilax, small grass yellow
25 Anaphaois java, caper white
27 Appias paulina, common albatross

Nymphalidae

1 Danaus plexippus, wanderer
3 Danaus chrysippus, lesser wanderer
11 Euploea coro, common Australian crow
18 Melanitis leda, evening brown
29a Hypocysta adiante, orange ringlet
33a Geitoneura acantha, eastern ringed xenica
36a Heteronympha morope, common brown
52 Xois arctoa, dingy ring
71 Vanessa korshawi, Australian painted lady
76 Junonia villida, meadow argus
84 Acraea andromacha, glasswing

Lycaenidae

37a Philiris innotata, common moonbeam
105b Theclinesthes onycha, onycha blue
109a Theclinesthes serpentata, chequered blue
120 Catochrysops panormus, forget-me-not
122 Lampides boeticus, pea blue
125 Zizina labradus, common grass blue
128 Evores lacturnus, tailed cupid

A NOTE ON THE MATING BEHAVIOUR OF AUSTRALIAN TRAPEZITINE SKIPPER BUTTERFLIES

Andrew Atkins, 45 Caldwell Avenue, Dudley, New South Wales, 2290

The following chronological record, describing the mating behaviour of Toxidia peron (Latreille), was made in mild weather (approximately 21 degrees Celcius) with patchy, hazy cloud cover and intermittent sunshine. The species was observed in my garden at Dudley, N.S.W. on the 14th November 1987.

1.44pm (DST). Female flies over bushes 2 m high. A male, previously perched in the sun on nearby leaves, intercepts the female. The pair immediately drop to the bushes and the male moves rapidly around the female. He twists his abdomen in and under her to complete copulation.

1.45 - 1.47pm. I disturb the pair three times. They are reluctant to fly, but on each occasion the female carries the male, which remains with wings together, for a few metres only. When at rest each butterfly of the pair remains with wings folded over the thorax and they face away from each other.

2.31pm. Male opens hindwings, and forewings slightly and then flies off rapidly. Female remains on bush, opening wings almost horizontally, curving her abdomen down in a repetitive motion. She then flies off after several minutes.

In this interaction (46 minutes), there appeared to be no preliminary courtship, copulation occurring instantaneously.

At 12.15 pm, March 29th, 1986, I observed the mating of Anisynta cynone gunnedah Couchman at Blackjack Mountain, Gunnedah, N.S.W. The male intercepted the female in a similar manner to that of T. peron, but the duration of the copulation was not recorded.

If the lack of courtship is typical for species of the Trapezitinae, it may explain why so few observations of mating behaviour of these skippers are documented. It should be noted that successful courtship interactions must not be confused with the slow fluttering of wings of females when perched or flying, following approaches by male skippers. This is almost certainly a 'rejection' behaviour.

****

BACK NUMBERS OF THE VICTORIAN ENTOMOLOGIST

Issues of this publication back to Volume 14 Number 6 are a available from the current Hon. Editor, and are priced at $1 each. For issues prior to December 1984 please contact the Hon. Secretary.

NOTES ON REARING MACLEAY'S SWALLOWTAIL

Pat & Mike Coupar, 143, Brackenbury St., Warrandyte, Victoria.

It has been our aim for the past eighteen months or so to observe and photograph the life cycles (mostly larvae and adults) of as many species of Lepidoptera as we have been able to find.

It had been in our minds for some time that we should try to collect and photograph either the eggs or the larvae of the Macleay's swallowtail butterfly (Graphium macleayanum macleayanum) and then rear it through to the adult stage. The larvae of this species in Victoria are known to feed on Southern Sassafras (Atherosperma moschatum), Mountain Pepper (Tasmannia lanceolata) and Alpine Pepper (T. Xerophila)(Common and Waterhouse, 1982).

At Murrindindi last Easter (April 1987) the opportuinity arose for us to study its life history. Murrindindi is a large area of State Forest north east of Yarra Glen and just south from Yea. We were on a well used walking track to the waterfall when we saw several Sassafras trees growing in a fairly open situation beside the fast flowing river. After turning over only one or two leaves, we discovered a small (14 mm) larva resting on the underside of a leaf near the base of the tree. It was green with small dorsal white dots and a blue shade of green on its ventral surface. We continued searching but were unable to find any more. At home the larva was transfered to a plastic container (approximately 12 cm deep and 14 cm wide). Some sprigs of Sassafras were put into a small glass bottle containing water and then plugged with cotton wool to prevent the larva drowning. The bottle was wedged into a circular hole cut in polystyrene which fitted tightly into the bottom of the plastic container. This prevented the bottle from tipping over. The container was covered with soft flywire held in position with a rubber band. We have found that by keeping the foodplant in this way it only needs changing once every week to ten days in the cooler months. We have successfully reared many moths using this method. The larva was kept in an unheated room in good light but away from direct sunlight. Under these conditions it fed and grew and ten days after collection had increased in length to 25 mm.

However, we felt that one larva was not enough to ensure the emergence of an adult so on a cold overcast day in May we went to Cement Creek on the slopes of Mount Donna Buang. This is a magnificent place with forest dominated by tall Montain Ash (Eucalyptus regnans) and superb understory of Myltle Beech (Northofagus cunninghami), Southern Sassafras and a host of ferns, mosses and lichens . We thought that this would be an ideal habitat to find more larvae. A friend came with us but after three hours of intensive searching and beating foliage we only succeeded in finding two pupae but no larvae or eggs. The pupae were found on different trees and were a bright, almost

fluorescent green. Each pupa was attached to the underside of an uneaten leaf on the lower branches. McCubbin (1971) has noted that "the larvae seem to prefer young plants or new shoots sprouting from near the ground from the trunk of an old tree". Our experience certainly found this to be true.

Meanwhile the larva from Murrindindi had grown to 33 mm fourteen days after collection. It spent much of its time on the side of the container but it always managed to find its way back onto its foodplant. Maybe if a piece of bark was included, as we do now for moth larvae, it would have rested on that. It pupated on the 13th of March (23 days after collection) on the side of the container. The chrysalis was green but much duller than those found at Cement Creek. We left it where it pupated and on the 20th of July a well formed male butterfly emerged. Comparison to specimens caught in the wild showed that its green colouration was a dull olive brown instead of pale emerald. We were able to take good photographs of the butterfly with its wings closed but had great difficulty in persuading it to rest with wings open.

On the 10th of November a female emerged from one of the pupae collected at Cement Creek. Inspite of the fact that the chrysalis remained a bright green the colours of the butterfly were, if anything, more washed-out than the Murrindindi specimen.

These observations indicate that a factor is required for the full development of wing colour and further that it is necessary during the pupal but not larval stage. The factor is unlikely to be ultraviolet light since the larvae pupate on the underside of leaves close to the ground in enclosed mountain gully habitats. Whether a critical range of temperature or humidity is essential remains to be discovered.

Acknowledgement We wish to thank Michael Braby for comparing our specimens to his reference collection.

References

Common, I.F.B. and Waterhouse, D.F. (1982). Butterflies of Australia, Field Edition. Angus & Robertson Publishers. pp 113-114.

McCubbin, C. (1971). Australian Butterflies.Thomas Nelson. pp 148-151.

SUBSCRIPTIONS ARE NOW DUE

SUBSCRIPTIONS ARE NOW DUE

RECENT PUBLICATIONS OF INTEREST

Knoxfield Notes. Weekly Times 4 Nov.1987, p.28. Paul Horne at the PRI, Burnley, has commenced investigation of alternatives to DDT and dieldrin in veg. crops. Table of previously registered uses—the pests, crops& other chemicals registered for similar uses.

Weevils cause concern. Weekly Times, 11 Nov.,p.18.
Weeding out pea weevils Weekly Times, 18 Nov.,p.4. Pea weevil could threaten Australia's reputation as a malting barley producer because of the mixing of the two grains in cropping rotation. Wheat affected by the insect will be rejected by the Aust.Wheat Board.

Gayle Austen, How love-lorn moths make shoppers happy. The Age, 7 Dec. 1987,p.6. Goulburn Valley fruit growers are happy to use the new "isomate" pheromone wire ties to control oriental fruit moths.

E.G. Matthews, Guide to the Genera of the Beetles of South Australia Part 5. Polyphaga : Tenebrionoidea. Special Educational Bulletin Series (No.8), South Australian Museum, North Terrace, Adelaide, 1987. 67 pp. All genera illustrated. $10.95 + $1.50 post and packing. Essential for coleopterists.

A. Soós & L. Papp (Eds.), Catalogue of Palaearctic Diptera Vol.5 Athericidae-Asilidae, Elsevier, 1987. 448 pp. Approx. $275

F. Ruttner, Biogeography and taxonomy of Honeybees. Springer Verlag, 1987. Approx 290 pp. $138.50

B.P. Moore, Guide to the Beetles of South-Eastern Australia, Fascicle No.8, pp.117-132, Valginae,Scirtidae,Rhipiceridae, Byrrhidae,Heteroceridae,Buprestidae. Aust.ent.Mag.14(4,5) Nov. 1987. Another essential for coleopterists.

M.S. Moulds & R.B Lachlan, The butterflies (Lepidoptera) of Christmas Island, Indian Ocean. Aust.ent.Mag. 14(4,5)58-66, Nov. 1987. Eurema and blues illustrated.

Donald S. Chandler, The Sunorfa of Australia (Coleoptera:Psephidae). Aust.ent.Mag. 14(4,5):67-70. 2 new spp. from north Qld.

G.A. Wood, New and interesting butterfly records from northern Queensland and Torres Strait. Aust.ent.Mag. 14(4,5):71-2. 14 spp.

Andrew Atkins & C.G. Miller, The life history of Croitana aronaria Edwards, 1979 (Lepidoptera:Hesperiidae:Trapezitinae). Aust.ent. Mag. 14(4,5):73-5. Illustrated early stages. Biology described.

Michael Braby, Behaviour of common imperial white butterflies. Victorian Naturalist 104(6):187-8. Feeding, hilltopping, reaction to hot weather.

D.G. James, Effects of temperature and photoperiod on the development of Vanessa kershawi (McCoy) and Junonia villida Godart. J.Aust.Ent.Soc. 26(4):289-92. Certain climatic/seasonal conditions during development produce migration-adapted adults.

Z. Mazanec, Natural enemies of Perthida glyphopa Common (Lepid: Incurvariidae). J.Aust.ent.Soc.26:303-8. Jarrah Leaf Miner— 10 Hymenopteran parasitoids caused up to 54% mortality; 9 bird predators; ants collect fallen larvae and other insects eat them.

P.B. Carne and P.G. Allsopp, Novapus macfarlandi sp.n. and notes on other species of Novapus Sharp (Coleoptera:Scarab:Dynastinae) from Australia. J.Aust.ent.Soc.26:309-12.

S.L. O'Neill, H.A. Rose & D. Rugg, Social behaviour and its relationship to field distribution in Panosthis cribrata Saussure (Blattodea:Blaberidae). J.Aust.ent.Soc.26:313-21. This wood cockroach lives in family groups under and inside logs. Adult males fight and courtship is simple. There are no social hierarchies or defined territories.

A.J. Lymbery, Seasonal populations in the life cycle of Mygalopsis marki Bailey (Orthoptera:Tettigoniidae). J.Aust.ent.Soc. 26:323-30. Bush cricket with two separate seasonal populations emerging in autumn and late spring/early summer. A W.A. species.

H.P. Schwarz, O. Scholz and G. Jonsen, Ovarian inhibition among nestmates of Exoneura bicolor Smith (Hymenoptera:Xylocopinae). Overwintering nests of this semi-social bee contain 1 or 2 inseminated females whose presence inhibits the ovarian development of unmated females. J.Aust.ent.Soc.26:355-9

David E. Dussourd & Thomas Eisner, Vein-cutting behaviour:insect counterplay to the latex defense of plants. Science 237:898, 1987 Vein cutting by such insects as the Chrysomelid beetle Labidomera clivicollis blocks the flow of poisonous latex to intended feeding sites and can be viewed as the insect counter-adaptation to the plant's defensive secretion.

Butterflies are not so dumb. New Scientist 17 Sept. 1987,p.47 (J.Animal Ecology 56:377). Capture-recapture studies of Heliconius butterflies in Costa Rica suggest that they avoid areas in their home range where they have previously been captured.

Bugs betray pollution. New Scientist 17 Sept.1987,p.47 (Biological J. Linn.Soc.31:333). The proportion of melanic meadow spittlebugs Philaenus spumarius in a population is proportional to its distance from stockpiles of pulverised coal.

Bees bring a breath of fresh air into hives. New Scientist 17 Sept. 1987,p.46 (J.Insect Physiology 33:623). A colony of honeybees controls the temperature, humidity and concentration of respiratory gases within its nest. Natural hives have only one opening and measurements at it show a pattern like invertebrate breathing.

Beetles cull their own broods. New Sci. 22 Oct.1987,p.35.(Behavioural Ecology and Sociobiology 21:179). The burying beetle Nicrophorus vespilloides culls its own larvae to allow enough food for the others to reach maturity.

E. McC. Callan, Biological observations on the mud-dauber wasp Sceliphron formosum (F.Smith)(Hymenopt.:Sphecidae).Aust.ent.Mag. 14(6):78-82, Jan.1988. Description of nest, mud collection, cell construction and provisioning with salticid spiders. Illustrated.

G.A. Wood, The life history of Hypocysta angustata angustata Waterhouse and Lyell and Hypocysta irius (Fabricius)(Satyrinae). Aust.ent.Mag.14(6):83-6. The Black and White and the Northern Ringlets both feed on Tetrarrhena (wire grass). H.irius is the first Aust. butterfly known to have less than 5 larval instars.

G.A. Webb, J.A. Simpson, E.E. Taylor, Notes on the distribution and biology of Theryaxia suttoni Carter (Buprestidae). Aust.ent. Mag. 14(6):98-9.

Continued on page 16.

AUTHOR INDEX TO VOLUME 17 (1987) OF THE VICTORIAN ENTOMOLOGIST

SUBJECT INDEX TO VOLUME 17 (1987) OF THE VICTORIAN ENTOMOLOGIST

Rocent Publications of Interost

From page 11.

R.B. Lachlan, New distribution records for some buttorflies and hawk moths from far northern Quoonsland. Aust.ent.Mag. 14(6):87-8 Dauan and Boigu Islands and Cape York.

P.S. Valentine and S.J. Johnson, Some new larval food plants for north Queensland Lycaenidae .Aust.ent.Mag. 14(6):89-91. 16 spp. with many new plants and notes on attendant ants.

Andrew Atkins, The life histories of Pasma tasmanica (Miskin) and Toxidia riotmanni (Semper) (Hesperiidae:Trapezitinae). Aust.ent. Mag. 14(6). Illustrated.

EXCURSION TO LAKE MOUNTAIN

DATE Sunday 28th February 1988

MEET 10.30 AM. Carpark about ½km along Lake Mountain Road from Cumberland Falls Road. 11 km from Marysville. Total Distance from Melb. GPO via Healesville = 108km.

MAPS Broadbent 301 150km around Melbourne.
Broadbent 333 Melbourne's North-East Hill Country.
Broadbent 231 Eildon and Acheron Valley.
Natmap Australia 1:250,000 Warburton.
Natmap Australia 1:100,000 Alexandra.

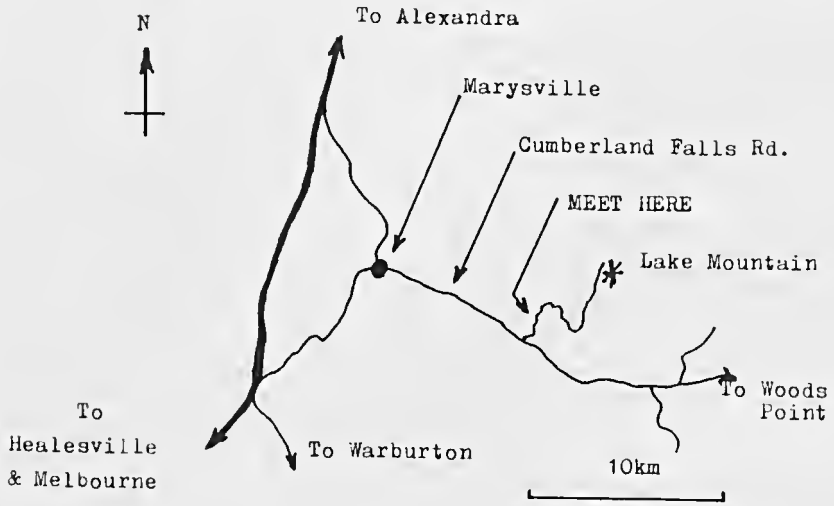
POLICE Park Road Marysville 63 3222

DOCTOR Willcox, 225 Maroondah Highway, Healesville 62 4334

HOSPITAL 337 Maroondah Hwy. Healesville 624300

FOOD & PETROL Available at Healesville.

ENQUIRIES Peter Carwardine 211 8958 Home.



Deadline for the next issue of the Victorian Entomologist is Friday 26 March 1988. Volume 18 Number 2 will be the 100th issue.

The Victorian Entomologist is produced on an old FACIT electric typewriter with the help of Liquid Paper and invisible sticky tape. Printing and binding at the Standards Association of Australia Printery, Clunies Ross House, Parkville, by Ros Church.

CONTENTS

OFFICE BEARERS

DIARY OF COMING EVENTS

Friday 19 February 8 pm - General Meeting
DAVID CROSBY : BUTTERFLY CONSERVATION IN BRITAIN

Sunday 28 February - Excursion to Lake Mountain.
Details on page 17.

18 March - Council Meeting

15 April - General Meeting
Philip Hicks : Insect Pests in the Garden

Scientific names contained in this document are not intended for permanent scientific record, and are not published for the purposes of nomenclature within the meaning of the International Code of Zoological Nomenclature, Article 8(b). Contributions are not refereed, and authors alone are responsible for the views expressed.